
CARROLL COUNTY

(Carroll County Water Service Area Map)

- Estimated 1999 population of 9,500--90% on public water
- Estimated 2020 population of 9,720--92% on public water
- 170 miles of water lines, with plans for 21 additional miles
- Estimated funding needs for public water 2000-2005--\$250,000
- Estimated funding needs for public water 2006-2020--\$705,000

Carroll County had an estimated population of 9,535 (3,820 households) in 1999 with a projected population of 9,720 (4,170 households) in 2020. Public water is provided to about 90 percent of the county's residents. In areas of the county not served by public water, about 2 of 5 households rely on private domestic wells and 3 of 5 on other sources. About 65 customers will be added to public water service through new line extensions in 2000-2020.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
CARROLL								-
Carroll Water Dist. #1				250				250
West Carroll W/D								-
Total				250				250

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
CARROLL								-
Carroll Water Dist. #1	4.5	26	135					135
West Carroll W/D	16.3	37	570					570
Total	20.8	63	705					705

PUBLIC WATER SYSTEMS

There are 10 public and semi-public water systems in Carroll County: 7 municipal--5 water districts, West Carroll Water District, Carroll County Water District No. 1, West Carroll WD/Henry Co #2, West Carroll WD/Trimble County Water District, West Carroll Water district/Milton Water District; 1 municipal, Carrollton Utilities; 1 private community systems; and 3 non-community systems. The City of Milton, Trimble County Water District, and Henry County Water District #2 also serve portions of the county.

WATER SERVICE AREAS

CARROLL COUNTY

Kentucky

Prepared By:
Water Resource Development Commission

Department for Local Government
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601-8204
502-573-2382 -- 502-573-2939 fax
<http://dlgnt1.state.ky.us/wrdc/>

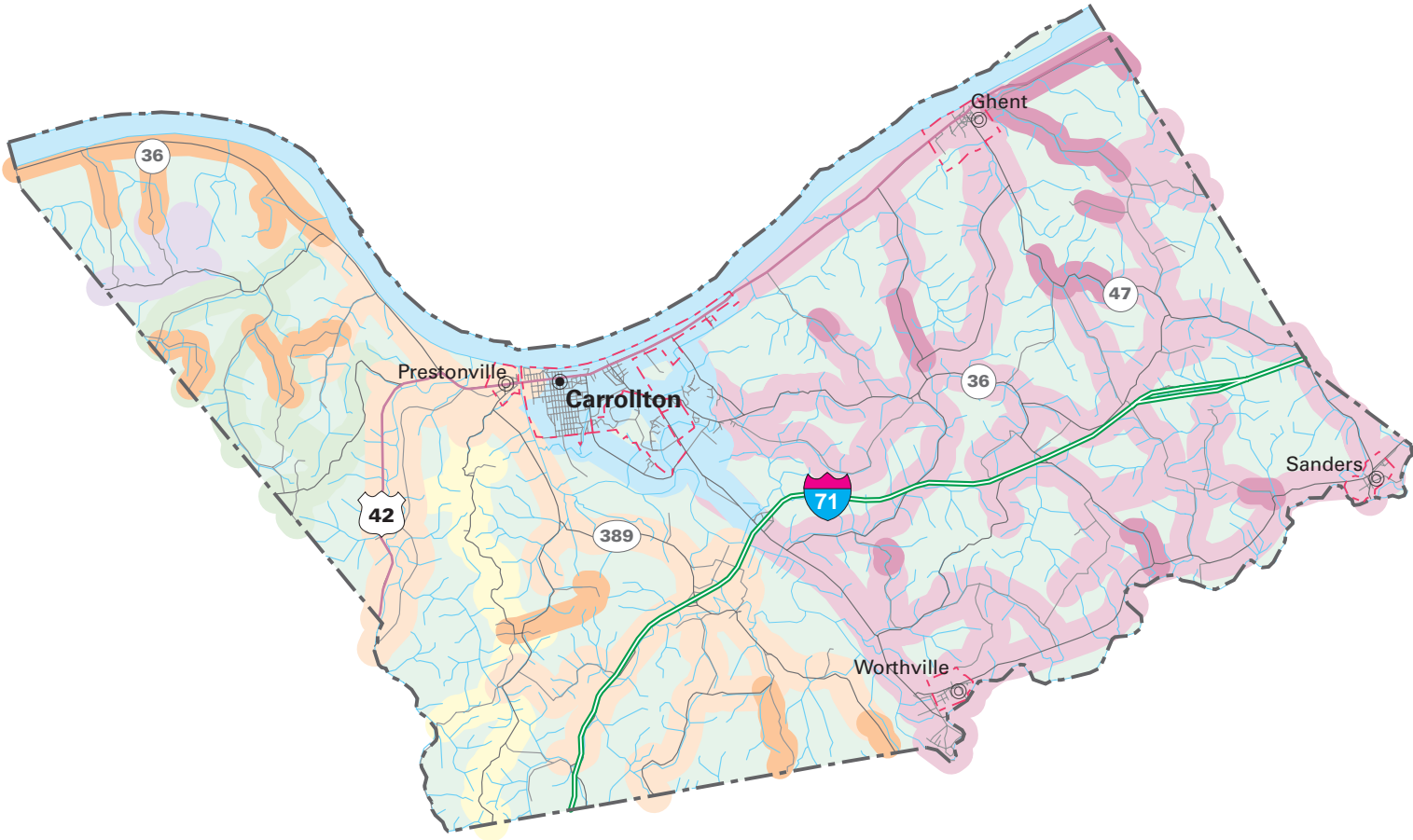
Bob Arnold, Chairman
Lawrence Wetherby, Executive Director

Final GIS & Cartographic Operations By:
Kent Anness & Kim Prough

Data Collection & GIS Input By:
Kentucky Area Development Districts



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WATER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		WEST CARROLL WATER DISTRICT/CARROLLTON
		TRIMBLE COUNTY WATER DISTRICT #1
		MILTON WATER AND SEWER DEPARTMENT
		HENRY COUNTY WATER DISTRICT #2
		CARROLLTON UTILITIES
		CARROLL COUNTY WATER DISTRICT #1

WEST CARROLL WATER DISTRICT/CARROLLTON

PWSID: 0210008
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:
Purchase Source: CARROLLTON UTILITIES
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (gallons): 94,000.00
Total Service Connections: 825.00
Number of Employees: 0.00
Treatment Operator Class: 1D
Distribution Operator Class:
Customer Rate for 1,000 Gallons: 5.56
O/M costs 1997: 202,328.00
O/M costs per Service Connection: 259.39
Net Revenue 1997: 24,351.00
Total Water Produced 1997 (gallons): 0.00
Water Sold 1997 (gallons): 48,595,580.00
Unaccounted-for Water 1997 (%): 12.00

The West Carroll Water District purchases its water from Carrollton Utilities, the Trimble County Water District, the Henry County Water District and the City of Milton in Trimble County. The District has 304 service connections in Carroll County and 512 service connections in Trimble County, serving a population of approximately 2, 100. It has 782 residential customers who used a total volume in 1998 of 39,657,600 gallons, and 18 commercial customers who used 2,293,200 gallons. The combined average daily usage of the four sources was approximately 185,038 gallons per day over the last twelve months. There is a storage capacity of 94,000 gallons in 2 tanks located throughout the District. The staff at Carrollton Utilities administers the West Carroll Water District operations.

West Carroll Water District is planning several extensions, most notably increasing its connectivity to surrounding water districts. There will also be a sizeable extension westward on US 42, all the way to the county line. The roads in western Carroll County are well served, through the cooperative efforts of several water districts.

CARROLL COUNTY WATER DISTRICT #1

PWSID: 0210066
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:

Purchase Source:	CARROLLTON UTILITIES
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):.....	0.52
Percent Daily Average Production:.....	64.00
Total Tank Storage Capacity (gallons):.....	670,000.00
Total Service Connections:	1,863.00
Number of Employees:.....	6.00
Treatment Operator Class:	2D
Distribution Operator Class:.....	3B
Customer Rate for 1,000 Gallons:.....	4.90
O/M costs 1997:.....	411,704.00
O/M costs per Service Connection:	228.47
Net Revenue 1997:	149,232.00
Total Water Produced 1997 (gallons):.....	234,609,000.00
Water Sold 1997 (gallons):.....	211,290,000.00
Unaccounted-for Water 1997 (%):	4.81

The Carroll County Water District No. 1 gets draws its water from six wells that are permitted together as a well field to draw 605,000 gallons per day. Four of the wells are located at the treatment plant in Ghent, ordinarily with 2 in use at any one time. The other 2 well as located at the new Gallatin County Water Treatment Plant. The District has 1,313 service connections in Carroll County, 292 service connections in Owen County, and 358 service connections Gallatin County, serving a population of approximately 6,150. The district has 1,379 residential customers who in 1998 used a total volume of 94,074,900 gallons, 105 commercial customers who used 32,032,800 gallons, and 19 industrial customers who used 85,182,300 gallons. The average daily production of the new water Carroll County Water District No.1 treatment plant in Gallatin County was 574,936 gallons per day. The district does not currently supply treated water to any other system, but would be willing to, if the need arises. There is a storage capacity of 670,000 gallons in 7 tanks located throughout the District. The Carroll County Water District No. 1 has 6 full-time employees.

The district's primary problem at this time is the inability of the lines to transport enough water from the new treatment plant to the rest of the distribution system. The district manager hopes that a new line along US 42 will alleviate the bottleneck. Much of the distribution system is constructed of 4-inch pipes, requiring system upgrades to facilitate further planned expansion into Owen County. It is estimated that 88 percent of the households within the service boundary are being served. This is excellent coverage for such a rural area. Some households will not be able to be served because of continual earth

slippage, which also causes problems for private wells. For these homes, trucked water may be the only solution.

CARROLLTON UTILITIES

PWSID: 0210067
System Type: COMMUNITY
Owner Type: MUNICIPAL
Surface Source:
Purchase Source:
Well Source:
Sells Water to: WEST CARROLL WATER DISTRICT/CARROLLTON
Treatment Plant Capacity (MGD): 1.50
Percent Daily Average Production: 41.00
Total Tank Storage Capacity (gallons): 1,000,000.00
Total Service Connections: 1,785.00
Number of Employees: 21.00
Treatment Operator Class: 2D
Distribution Operator Class: 3A
Customer Rate for 1,000 Gallons: Not available
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons): Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

Carrollton Utilities draws its water from three wells that have a combined withdrawal capacity of 1,400,000 gallons per day. The District has 1,605 service connections serving a population of approximately 4,200. It has 1,323 residential customers who used a total volume in 1998 of 77,786,900 gallons, 285 commercial customers who used 120,264,000 gallons, and 2 industrial customers who used 7,030,200 gallons. The average daily production of the Carrollton Utilities new water treatment plant was 720,000 gallons per day in 1997. It supplies water to the West Carroll Water District and has an emergency connection with Carroll County Water District No. 1. There is a storage capacity of 1,000,000 gallons in 2 tanks located within the district. Carrollton Utilities has 21 fulltime employees.

Carrollton Utilities currently serves 100% of the households within the Carrollton city limits and has no plans for waterline extensions. Carrollton Utilities also provides water to General Butler State Recreation Park

WEST CARROLL WD/HENRY CO #2

West Carroll WD/Henry Co #2 is located in Carroll County. The system serves a population of 366 and has 111 service connections. The water district purchases water from Henry County Water district #2.

WEST CARROLL WD/TRIMBLE COUNTY WATER DISTRICT

West Carroll WDTrimble County Water District is located in Carroll County. The system serves a population of 775 and has 229 service connections. The water district purchases water from Trimble County Water District.

WEST CARROLL WATER DISTRICT/MILTON WATER DISTRICT

West Carroll Water district/Milton Water District is located in Carroll County. The system serves a population of 33 and has 11 service connections. The water district's water is purchased from Milton Water District.

OTHER SYSTEMS

GREEN ACRES MOBILE HOMES COURT

Green Acres Mobile Homes Court is located in Carroll County. The system serves a population of 92 and has 28 service connections. The private, community system has treatment capacity of 14,000 gallons per day and the water source is wells.

K U GHENT GENERATING STATION

K U Ghent Generating Station is located in Carroll County. The system serves a population of 245 and has 103 service connections. The private, non-transient, non-community system has treatment capacity of 75,000 gallons per day and water source is wells. The charge for the first 5000 gallons of water was \$34.42.

DOW CORNING CORP/CARROLLTON

Dow Corning Corp/Carrollton is located in Carroll County. The system serves a population of 511 and has 1 service connection. The private, non-transient, non-community system has treatment capacity of 288,000 gallons per day and the water source is wells.

AMERIFORM MANUFACTURING, INC

Ameriform Manufacturing, Inc is located in Carroll County. The system serves a population of 230 and has 1 service connection. The private, non-transient, non-community system has treatment capacity of 16,800 gallons per day and the water source is wells.

PRIVATE DOMESTIC SYSTEMS:

About 900 people in the county rely on private domestic water supplies: 350 on wells, and 550 on hauled water or other sources.

The alluvium along the Ohio River is the best source of ground water in the county. Many properly constructed drilled wells will produce several hundred gallons per minute from the alluvium, with most wells able to produce enough for a domestic supply at depths of less than 100 feet. Water is hard or very hard but otherwise of good quality.

In the bottoms of the Kentucky River, Eagle Creek and in the lower sections of the larger creek valleys that drain into the Ohio River, most drilled wells will produce enough water for a domestic supply at depths of less than 100 feet. Some wells located in the smaller creek valleys will produce enough water for a domestic supply except during dry weather. In the upland areas of Carroll County that encompasses approximately 50% of the county, most drilled wells will not produce enough water for a dependable domestic supply except along drainage lines that may produce enough water except during dry weather. Ground water in these areas is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet.
